Low-Heat Input Welding Alloys SME E24















SME E24

Electrodes for MMAW Process

Ni & Ni Alloys

Low-Heat Input Welding Alloys

Alloys:

Cr, Ni, Mo, Nb, Mn, Fe

Characteristics:

SME E 24 weld deposit is resistant to seawater corrosion, wide variety of acids and alkalis. It has High temperature strength and oxidation stability and High resistance to pitting, crevice, inter-crystalline and stress corrosion cracking.







Technical Data:

UTS : 76-86 kgf/mm²
YS : 42-52 kgf/mm²

Elongation (L = 4d) : 30-35% Impact energy (CVN at 20°C) : 55-80 J

At 196°C): 50-60 J

Applications:

- 1. Deposits are similar to ENiCrMo-3.
- 2. To join and hard-surfacing of identical or similar grades of heat-resisting steels and alloys
- 3. Welding alloy steels like H 11, H 13, 17 Mn 4, St E 355, 15 Mo 3
- 4. Suitable in sea water and offshore plants, chemical-engineering (nitric, hydrochloric, sulphuric, phosphorous acid as well as alkalis), flue gas dust collectors..

$\underline{Welding\ Current:}\ DC\ (+)$

Size (~mm)/Length	2.5 x 350	3.2 x 350	4.0 x 350
Current (amps)	45 - 70	70 - 110	100 - 140

Availability:

Standard Size: 5.0, 4.0, 3.2 and 2.5 in 350 mm length

Packing: 2, 5 Kg.

SENOR

Note On Usage:

- 1. Clean the workpiece thoroughly for a crack and porosity free deposit.
- 2. Dry electrode for 1 hour at 300 0C to remove moisture.
- 3. Adopt short arc and ensure minimum heat input using lowest possible amperage, follow stringer bead technique.
- 4. The crater to be filled properly by back whipping or dwelling.
- 5. Do not exceed recommended Welding Parameters.

Above are basic guidelines and will vary depending on joint design, number of passes and other factors.

WARNING

Protect yourself and others. Read and understand this warning. Do not remove this warning.

Fumes and Gases can be hazardous to your health

- Before use, read and understand the Material Safety Data Sheet (MSDS), the manufacturer's instructions, and your employer's safety practices.
- If MSDS is not enclosed. Obtain from your employer.
- Keep your head out of the fumes. See Section 5 of the MSDS for specific fume concentration limits.
- Use enough Ventilation, exhaust at the arc, or both, to keep fumes and gases from your breathing zone and the general area. If needed, use a proper respirator.
- No hazards exist before this product is used in arc welding.

Electric Shock can kill

- Always wear dry insulating gloves
- Insulate yourself from work and ground.
- Do not touch live electrical parts.

ARC Rays can injure eyes and burn skin

- Wear welding helmet with correct filter.
- Wear correct eye, ear, and body protection.

Welding can cause fire or explosion

- Do not weld near flammable material.
- Watch for fire, keep, extinguisher nearby.

Read American National Standards Z49.1, "Safety In Welding, Cutting and Allied Process." from American Welding Society.